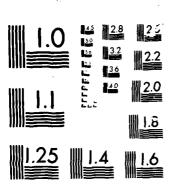
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The Armored Infantry in the US Force Structure

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Major Thomas M. Kriwanek Infantry



School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

2 December 1985

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One of the conclusions drawn from this investigation is that the US armored infantryman is not being fully developed under the current policy. The tactical, technical and doctrinal development of the armored infantry has not received the necessary emphasis to maximize its potential. The designation of the armored infantry as a separate branch would not be an effective option based upon several constraints listed in the study. The management of the armored infantry by the Armor Community appears to be the best option to maximize the capabilities of the US armored infantryman.

The Armored Infantry in the US Force Structure

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ABSTRACT

THE ARMORED INFANTRY IN THE US FORCE STRUCTURE: A study of how US armored infantrymen should be trained, by Major Thomas M. Kriwanek, USA, 39 pages.

This study is an analysis of how US armored infantrymen are trained, controlled and assigned to units equipped with the infantry fighting vehicle. The purpose of the analysis is to determine the best option for the management of the armored infantry within the US force structure. Three management options are analyzed - the continuation of the current policy, the designation of a separate armored infantry branch and management by the Armor Community. A historical study of the development of the US armored infantry is outlined to determine how the current policy was achieved. The development of armored infantry in the German, Soviet and Isreali Armies is outlined for comparison to the US situation.

One of the conclusions drawn from this investigation is that the US armored infantryman is not being fully developed under the current policy. The tactical, technical and doctrinal development of the armored infantry has not received the necessary emphasis to maximize its potential. The designation of the armored infantry as a separate branch would not be an effective option based upon several constraints listed in the study. The management of the armored infantry by the Armor Community appears to be the best option to maximize the capabilities of the US armored infantryman.

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THE ARMORED INFANTRY

INTRODUCTION

The purpose of this monograph is to determine the best option for the management of the armored infantry within the US Army force structure.

To properly manage the potential of this resource, three major options will be analyzed:

- (1) The armored infantry could continue to be managed by the Infantry Community, a continuation of the current policy.
- (2) The armored infantry could become a separate branch within the US Army force structure because of the special nature of its mission.
- (3) Finally, the US armored infantry could be managed by the Armor Community because of its close alignment with the armor mission.

Some background information on the current situation is necessary to understand why armored infantry management is an issue at all. The introduction of the Bradley Fighting Vehicle (BFV), in 1981, dramatically increased the capabilities of the US armored infantryman. The infantry squad gained the ability to defeat enemy armor and vehicles at extended ranges while remaining mounted. More important, the Bradley Infantry squad gained the ability to move at the same speed as the Abrams Main Battle Tank and in the same environment, thus enabling the force to execute traditional infantry missions in support of fast moving armor operations.

The infantrymen equipped with the Bradley Fighting Vehicle paid a price for these enhanced capabilities. Because the vehicle is equipped with a new array of weapons systems, the crew must train in areas not heretofore required of infantrymen. The infantry dismounted tactical

strength has been significantly reduced (six soldiers per squad) with the advent of the fighting vehicle. More important, the fighting vehicle infantrymen require a new mindset for implementation of the variety of tactical missions that confront them on a regular basis.

The fundamental mission of the armored infantry is to conduct operations that complement tank forces. Not intended to be another tank force, units equipped with Bradley Fighting Vehicles appear nonetheless to be more than an ordinary infantry force. The armored infantry mission is significantly different from that of the traditional infantry. The best definition of today's armored infantry mission comes from the 1957 FM 17-20. Armored Infantry Units Platoon, Company and Battalion: "The armored infantry has the mission of assisting in the successful advance of tanks through mounted or dismounted action. To accomplish this mission, the armored infantry closes with and destroys or captures the enemy by fire, maneuver, and shock action."1 A specific field manual for the armored infantry disappeared in the early 1960's, but the mission of the armored infantry did not. With the advent of the Bradley equipped armored infantry, the 1957 mission statement is even more appropriate.

FM 100-5, (Draft) Operations (June 1985), does not state the specific mission of infantry but describes the capabilities of units in Appendix C. FM 100-5 notes a clear difference between light infantry and mechanized infantry (US doctrine defines 'mechanized' infantry as armored infantry in IFVs and mechanized infantry in armored personnel carriers (APCs)). Light infantry is capable of conducting independent operations, while the capabilities of mechanized infantry are described in terms relative to tanks.² Current doctrine does not envision IFV

pure forces being employed; the formation of company level teams of tanks and armored infantry is seen as likely.3 Thus, it is clear that the armored infantry mission must be closely aligned with that of tank forces, and its mission priorities and training must be reflective of that continuing combination. While it is true that some of missions will be traditional infantry dismounted missions, those missions that should receive the greatest emphasis are not necessarily traditional. Navigating at high rates of speed, fighting a stabilized system while mounted, conducting hasty clearing operations, executing tank killing overwatch missions and performing hasty breaching operations are examples of missions which must have a higher training priority than they have in the non-armored infantry community.

The current Army approach toward integrating the BFV and structuring these new assets to maximize their capabilities holds the infantry responsible for manning, training and developing the fighting vehicle force. The infantryman carries the 11 series military occupation specialty (MOS). Within the 11 series MOS, the enlisted fighting vehicle infantryman is designated with an M identifier while the infantry officer, if fighting vehicle qualified, receives a 3X additional skill identifier. Once given M and 3X identifiers, the personnel system should track fighting vehicle skilled personnel and reassign these individuals to a fighting vehicle unit upon rotation. If the system worked perfectly, the 11M infantryman would develop as a highly specialized infantryman within the greater infantry family. The more likely case will see the 11B infantryman (non-BFV qualified) assigned to fighting vehicle units in which he requires extensive training, while 11M infantrymen (BFV qualified) will be assigned to the

non-armored infantry community, degrading and failing to utilize fully the expensively earned fighting vehicle skills. The large size of the infantry population, the lack of emphasis upon armored infantry and the relatively small numbers of fighting vehicle equipped units have led to the malassignment of individuals, as evidenced by the current influx of 118 infantrymen to the 3rd Infantry Division for duty in 11M positions.4

Training the armored infantry force is currently the responsibility of the Infantry which, among its many other responsibilities, trains the mechanized infantryman, the light infantryman, the mortar infantryman, the airborne infantryman and the ranger infantryman. Whether the Infantry has managed these diverse responsibilities properly and efficiently is a question that needs to be addressed carefully and analyzed in a nonparochial manner.

The fighting vehicle infantryman's mission is closely linked to what he is able to accomplish with the vehicle; his training priorities should reflect that emphasis. The Infantry School has not emphasized the training of the armored infantry force as evidenced by the lack of resources allocated to this portion of the infantry family. No department at Fort Benning is dedicated to armored infantry doctrine and training; rather, they are sub-tasks of several departments and as sub-tasks, armored infantry does not receive adequate treatment. Evidence is the fielding of the Bradley Fighting Vehicle without a gunnery manual that had been tested and validated. Furthermore, although soldiers in the rank of E-6 and above should have the opportunity to attend the Bradley Commanders' Course when assigned to an armored infantry unit, this course has not been able to fully meet the Army's needs for the training of small unit leaders.⁵ The course

concentrates on the technical aspects of the weapons system, not tactical skills, and there are insufficient spaces to train the number of soldiers required. Additionally, the Bradley Master Gunners' Course at Fort Benning will continue to have difficulty in producing the number of master gunners required because of the small class size and the three month turnaround required for course completion. This lack of institutional resources requires the armored infantry unit in the field to become the soldier's primary trainer, which in turn may lead to a lack of standardization unless a well-developed, cogent doctrine exists. Unfortunately, as of this writing, it does not.

The infantry fighting vehicle has been fielded without adequate doctrinal reference to its increased capabilities. The Infantry School is the proponent for this doctrine. Though the fighting vehicle unit, based upon its capabilities, is clearly a different type unit than any other infantry force in the US Army structure, it has received little or no written guidance for employment. In the major doctrinal sources, the Field Manuals (FMs), the fighting vehicle division receives little or no attention while the airborne, airmobile and light infantry divisions all have doctrinal FMs. The modernized brigade/division equipped with the fighting vehicle is treated doctrinally by the same FM as a M60/M113 unit, without adequate consideration given to the increased capabilities of the armored infantry. FM 71-1J, The Tank and Mechanized Infantry Company Team, is the manual that outlines how the modernized tank/infantry team fights but the US Armor School is the proponent.6 The only armored infantry manual that is unique to the armored infantryman is FM 7-7J, The Bradley Platoon and Squad, which concentrates on techniques for the small tactical unit. Thus, it

appears that the Infantry School has not been aggressively pursuing doctrinal development of the armored infantry force.

An examination of the history of armored infantry forces may provide insights as to where the US force should go in the future. A brief look at the development of the US and other armored infantry may help determine which options have proven successful in the past. In that light, this monograph will examine the US armored infantry experience as well as that of the German, Soviet and Israeli armies.

HISTORICAL AND CURRENT PRECEDENTS

It is useful to look at the historical precedents that led to the development of the armored infantry. These precedents help explain why a specific branch of the service developed in a particular manner. Another useful perspective may be gained by examining different countries' views on the same subject. The current situation of the US Army can then be evaluated in light of these experiences to determine what could be a successful management option. An examination of the US Army experience in the development of armored infantry is a good starting point, to be followed by a close look at other historical precedents.

Initial US armored infantry development can be traced to efforts prior to World War II. A cavalry officer, Adna Chaffee, established the Experimental Armored Force in 1928 at Fort Meade. 7 This small unit of two tank battalions, one motorized infantry battalion and an armored car troop was absorbed by Fort Benning in 1931 because of a lack of funds allocated to the Army by Congress.8 Both the Infantry School and the Cavalry School pursued the development of the tank/mechanized force. The early German successes in World War II led to the reevaluation of

the armor concept in America. In 1940, both infantry tank and mechanized cavalry leaders determined that the development of the armored force was too conservative under the control of the traditional branches. The armored force was a low priority to the Chiefs of Infantry and Cavalry.9 The "Armored Force" was established in July 1940 as a result of the need to develop fully the armored unit. Two armored divisions were authorized in 1940 outside of the traditional arms and were assigned two battalions of armored infantry as part of the "Armored Force." Initially, the Chief of the Armored Force was charged with the formulation of tactics and doctrine, to include the development of equipment to be used by the force. 11 As demonstrated by these few facts, the early development of the US armored force was not a smooth process.

The pre-World War II leaders of the US Armored Force had their hands full attempting to define the role of the tank in future warfare. The situation in the US put a number of constraints upon the development of the Armored Force. Interbranch parochialism, a lack of resources and an unsupportive Congress were just some of these constraints. These early leaders saw that the tank had to be supported by armored infantry even during the tank's first stages of development. As a result, the first tank forces were comprised of tanks and armored infantry. It is not unusual that the tank portion of the armored force received the largest amount of intellectual and developmental effort. The armored infantry was recognized as an important element of the armored force, and tactical and doctrinal development was unified under the control of the Chief of the Armored Force. The US experiences in World War II led to further growth of the armored infantry concept.

The importance of the armored infantry force developed rapidly during World War II. Two aspects of armored operations appeared critical upon numerous occasions: the need for more infantry in support of armored operations and the need for the infantry to stay mounted to maintain the same speed as the tank elements. The ratio of armored infantry to tanks in an armored division increased throughout the war. The proportion of infantry to tank forces increased from one to two at the beginning of the war to about one to one by the war's end.12 $_{Two}$ armored divisions, the 2nd and the 3rd, kept a heavy tank configuration until 1945 but were continually augmented with an infantry regiment. 13 Armored commanders demanded a personnel carrier for their armored infantrymen that had equal mobility with the tank, protection from shrapnel, and supporting weapons. 14 On occasion, infantryman remaining mounted attacked with success. 15 The Key in these instances was not so much the ability to fight mounted as it was the requirement to continue to move with the tanks and not become separated where defeat in detail was a probability. This lesson emphasized tank/infantry integration.

Tanks and infantry working in a complementary fashion was a prerequisite for success. A common complaint of wartime commanders was a lack of infantry-tank training in units without organic armor. 16 This was not a problem between the armored infantry and tank team because of the habitual relationship that existed between the two. However, there are numerous examples of tank units attached to infantry divisions where the combined arms synergy did not occur. Two examples are the attacks on Santa Maria Infante during the Italian Campaign and the battle on Tanapag Plain during the fight for the Pacific island of Saipan. In the former case, tanks were attached to an infantry unit for an assault on a

small town. A tank platoon of Co A, 760th Tank Battalion was virtually wiped out by piecemeal commitment without adequate infantry support when it encountered a mine field while beginning the attack.17 The same event occurred at Tanapag Plain when tanks assigned to 3d Battalion, 105th Infantry were not properly integrated into the infantry plan.18 The failure of infantry supported by tanks to take Harakiri Gulch in a coordinated manner led to the destruction of the 105th Infantry Regiment.19

Armored infantry and tank forces at the town of Singling during the December 1944 Lorraine Campaign near Strasbourg, France achieved the necessary synergy to create success. The tactical success achieved by elements of the 37th Tank Battalion and the 51st Armored Infantry Battalion at Singling led to the continued advances of the 12th Armored Division. These tank and armored infantry forces attacked a superior force in a improvised manner and were able to create the conditions for success. Neither of these forces would have been successful by itself, but they complemented the strengths and weaknesses of the other by working together.

Another example of armored infantry and tank integration occurred during the capture of the town of Troyes, France, in 1944, by Task Force West of the 4th Armored Division. In this action, armored infantrymen of the 10th Armored Infantry Battalion and elements of the 35th Tank Battalion attacked mounted to defeat a superior force of the 51st SS Brigade.²¹ The success of this action was the result of the high mobility and integration of armored infantry and tank elements, a result achieved only by habitual relationship and experience.

The armored infantry in World War II was trained by the Armored Force, the Infantry Center and by the gaining armored division to insure that the tank and armored infantry team worked. The Armor Center was responsible for the training of armored infantrymen until June of 1941, when the training responsibility reverted to the Infantry Center.22 This system worked because the specialized tasks of the armored infantry were considerably less complex than they are today. The Armor Center conducted the Officers Advanced Armored Infantry Course to qualify company and battalion commanders for tank and armored infantry units.23 The most important training of leaders appears to have taken place at the unit upon arrival. In World War II, the armored infantryman had ample time to work with tank units once he arrived at his unit; a luxury not available on the future battlefield. This is demonstrated by the performance of the armored infantry at Singling and Troyes. The same can not be said of the foot infantryman because normally he was not associated with tanks. Such was the case in the previously sketched incidents at Santa Marie Infante and Tanapag Plain. What did the Army learn from these successes and failures with infantry in World War II? There were a series of findings that led to important armored infantry developments in the post-war period.

Some of these lessons were incorporated into the post-war force structure and Field Service Regulations. One lesson was that armored operations were limited in World War II because of a shortage of armored infantry.24 Another finding restated in the 1949 version of the Field Service Regulations was that no one arm won battles; it was the combined and coordinated action of all.25 How the Army went about applying these

lessons in the post-war period resulted from several assumptions and constraints imposed by the leaders of the time.

The Army became preoccupied with the nuclear battlefield in the 1950s and the development of the armored infantry stagnated. Pentomic concept for heavy forces was the response to the nuclear battlefield while elsewhere in the force structure airborne and rapid deployment forces received increased emphasis.26 Of the twenty active divisions in the force structure in 1956, only four were armored.27 Korea was in part responsible for the development of more deployable forces. Tanks and armored infantry appeared to have little application in a war dominated by light infantry and artillery. 28 However, one exception in Korea that emphasized the necessity of tank and infantry coordination was the failure of TF Crombez at Chipyong-ni. action, the infantry of Company L. 5th Cavalry was almost entirely wiped out because of poor coordination and no organic armored protection.29 In spite of this lesson and those of World War II, warfare of the 1950s did not require large numbers of heavy and expensive armored infantry forces. Armored infantry organization in the armored division under the Pentomic concept was only slightly affected, while in infantry units armored personnel carriers were organic to the transportation battalion and attached to infantry units on a mission basis.30 result of these actions was a stagnation of conceptual thought about armored infantry. The armored forces became more centered upon the tank, while the future for the infantryman in the late 1950s appeared to be in the airborne or deployment forces. The 1960s led to a reevaluation of the US Army force structure that resulted Reorganization Objectives Army Division (ROAD).

The ROAD concept reorganized almost all of the units in the Army. A preliminary study at CGSC in 1961 suggested that there should be two types of battalions, those for mounted combat and those for dismounted combat. 31 The formation of mechanized divisions irrevocably linked armor and armored infantry resources and intellect. 32 With the advent of the Vietnam conflict, the armored infantry again lost emphasis as the priorities were centered upon another type of combat. The end of the Vietnam War and the lessons of the Arab-Israelí 1973 War caused the Army to relook the armored concept; with one conclusion that technology had advanced faster than doctrine. 33 The infantry commander now had advanced weapon systems that he did not fully understand how to employ. How were such weapons developed?

A brief look at the army's personnel carrier/fighting vehicle program helps trace the history of the armored infantryman. The early US efforts in the armored infantry field were limited to half track vehicles in the form of the fairly reliable M3. This vehicle saw extensive action throughout World War II but suffered from multiple shortcomings. Among them high silhouette, slow speed, poor maneuver ability, noisy engine and suspension, high gasoline consumption and no armor slope were central.34. The first fully tracked armored US personnel carriers were the M39 and the M44, both based upon an existing tank destroyer chassis.35. A modification of the M44 design led to the development of the T18 armored personnel carrier. Overhead cover was a design feature of all US armored personnel carriers from the M44 on. The expense of these early carriers hindered the actual fielding of the T18.36. The T75 and the T59 were developed as the successors to the T18. These vehicles in turn led to the M113 armored personnel carrier in the

1960s. The M113 was one of the most successful APC designs in history based upon its characteristics of mobility, reliability, relatively inexpensive production, and amphibious capability.37 The early development of the first US infantry fighting vehicle came from concept studies made by the Pacific Car and Foundry Company (PACAR).38 A series of prototypes were developed beginning in 1964 by PACAR, but no decisions concerning the IFV were made by the Army.

The Advanced Concept Group of the Tank-Automotive Command (TACOM) started studies for a follow on vehicle for the M113 in 1963.39 Numerous concepts were explored and in 1971, the requirements for the Mechanized Infantry Combat Vehicle (MICV), later named the Infantry Fighting Vehicle (IFV) were set. FMC received the developmental contract in 1972 and began development of the M2/M3 Infantry Fighting Vehicle.40 The armored infantry of the US Army had its first infantry vehicle nine years later, in May of 1981. This short description demonstrates the difficulty encountered by the armored infantryman in finding his place in the force structure.

Although the need for a mobile, protected armored infantry vehicle with the capability to fight mounted was identified in World War II, a shortage of resources and the lack of an ardent sponsor prevented the development of the first generation of a true fighting vehicle for thirty-six years. There were a number of factors that influenced the priorities that the Army pursued during this time and that caused this slow development. The nuclear battlefield, the Korean and Vietnam Wars, the development of other forces and the lack of advocacy within the armored infantry community were all responsible for such slow development of the infantry fighting vehicle. Based upon these

historical facts, a pattern emerges for the development of the armored infantry.

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A brief evaluation of the US experience suggests that the Army has been able to meet the manning, training and development needs of the armored infantry when forced by an adversary's development and when adequate time and resources were allocated. This mission was accomplished in spite of the lack of clear direction for the armored infantry. The only time heavy forces met an equally equipped enemy was in World War II, and the US armored infantry was adequate. A mission for armored infantry was identified early, and the US Army had ample time to develop an armored infantry force prior to commitment in World War II. Training was accomplished to a large extent by combat experience and unit training. The technical and tactical developments for the armored infantryman were not carried on from period to period in a systematic and organized manner. As a result, armored infantry skills perished as a soldier was reassigned to a non-infantry unit. The US Army school system did not institutionalize armored infantry experiences as well as it should have. The lack of development of the armored infantry has been cost effective because no major armored opponents have been met on the battlefield since World War II. Politically, a status quo has been maintained to the general satisfaction of all branches.

This short history of the US armored infantry paints an overview of the US developmental experience which can be compared and contrasted with the experiences of the armored infantry in other countries. The first to be compared is one of first powers to put armored infantry concepts into practice — Germany.

Though the requirements of the Bundeswehr are substantially different from those of the US Army, it is useful to examine how the Germans developed their armored infantry and how they train those soldiers today. The Germans introduced the world to large scale armored warfare in World War II. As the early innovators in this field, they employed armored infantry integrated with their tank forces and this synergy was responsible in large measure for the initial successes that they enjoyed. After their defeat in the war, the Germans continued to develop armored infantry as a major portion of their forces. For these reasons, German armored infantry in World War II provide a useful starting point.

The German Army recognized the need for infantrymen to be able to accompany and support tanks prior to World War II. Heinz Guderian, influenced by Liddell Hart, was responsible for putting this into practice in the German armored force.41 The German Sdkfz.251 (Sonderkraftfahrzeug = special vehicle) half track was developed for support of Panzer formations while the concept of Panzergrenadiers (armored infantry) came into being during the early successes in Poland and France. The panzergrenadier was trained to fight from his vehicle and maintain the pace of the tank unit.42. A shortage of resources did not allow the Germans to expand the uses of their armored infantry. Thus, during the invasion of France only 2 of the 80 mechanized battalions in the force were equipped with the Sdkfz.251. At best in 1943, the Germans were only able to equip 26 of 226 mechanized units with the Sdkfz.251.43 Nonetheless, the ability of armored infantrymen to stay with supported tank units proved its worth on every front in World War II. In 1944, the Germans developed the first full tracked

infantry fighting vehicle. It mounted a 20mm cannon, but due to economic and tactical problems the vehicle was not produced.⁴⁴ The defeat of the Wehrmacht in World War II led to a temporary end of German armored infantry development.

The post World War II development of the Bundeswehr demonstrated an early interest in an armored infantry force. The SPZ 12-3, Schuetzenpanzer, became part of the early force structure. This early infantry fighting vehicle mounted a 20mm cannon and offered a hull that provided good protection. 45 In 1971, the first German Marder IFV entered service offering mobility, protection and mounted combat for the German armored infantryman. The development of the armored infantryman receives a high priority in the German army.

Currently, the German armored infantryman is part of the overall armored force. German brigades are combined arms organizations. Cross attachment within the brigade is regularly practiced to insure close coordination between the maneuver arms. The task organization depends upon the mission and can take place down to the individual vehicle level. 46 This means that an infantry squad could be attached to a tank section. Leaders are expected to know and understand the characteristics of the other arms and may expect to control any other arm for a given mission. As a result, the German Army has one school at Munster for the training of all armored force branches. 47 The close coordination of tank and armored infantry units to create combined arms synergy is obtained by insuring a common standard for all armored force soldiers. The training of the armored infantry leader is an extended process.

The panzergrenadier spends the first nine months of service learning individual skills with his Marder unit. He remains with the unit until he becomes an NCO. The NCO returns to the Combined Arms School for an eleven week course in the employment of the dismounted element and returns to his unit as a dismounted fire team leader. After at least another year in his unit, the NCO returns to the Combined Arms School for an additional four week instruction in the technical aspects of Marder employment. He is qualified as a gunner and temporary vehicle commander upon completion of this course, and he returns to his Marder unit to practice and apply these newly acquired skills. As a senior NCO, the leader returns to the Combined Arms School for a course on the tactical skills of the Marder commander. Upon graduation from this course, the senior NCO is qualified as a Marder commander. After several years experience as Marder commanders, some senior NCOs are returned the the Combined Arms School for training as platoon leaders. The object of this program is to develop armored infantry leaders in a gradual manner combined with years of practical experience.49 striking element of this process is the element of stability within the armored infantry force.

The German Army has made a clear decision to convert almost all of its infantry to armored infantry. The German specialty system assigns the soldier an armored infantry occupational specialty that is closely linked to the armor force. The armored infantry leader is assigned to a Marder unit and stays there until he matures into an effective Marder commander. Thus, the German Army appears to have a clear direction for armored infantryman. They recognize the armored infantry mission, closely integrate this force with the armor, follow a specific

developmental program and have an effective assignment policy. They have made the decision to pursue these objectives in spite of opposition and the cost involved. As a result, the Germans appear to have taken a clear long-range approach to the armored infantry as a major infantry specialty within the force structure, closely aligning this force to the armor.

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Armored infantry in the Soviet Army is organized in a similar manner. As the most powerful opponent that the US may face, their concept of armored infantry is particularly interesting because their resources, world commitments and potential more closely match the US than any other country. Despite these factors, the Soviet situation is unique and is largely based upon a set of assumptions not applicable in the United States.

The Soviet Union had extensive experience in the use of armored formations in World War II. However, whether supporting or supported, the infantry almost always fought on foot. Although moved to the battlefield in trucks and on tanks, the Soviet infantry, upon contact, dismounted to fight.49 German General F. M. von Senger und Etterlin contends that despite numerical superiority, the Soviets did not earlier defeat the Germans on the eastern front because they lacked armored infantry.50 Soviet tank forces were able to advance rapidly but quickly became separated from their less mobile supporting infantry. The Germans hastily blocked these tank forces in depth, and destroyed them in detail because they had no organic infantry support. The first Soviet armored infantry carrier was the BTR 152, developed near the end of World War II in the image of the German Sdkfz.251.51

Armored infantry as a Soviet concept did not come into being until the post-war period when the USSR developed a series of wheeled and tracked armored personnel carriers that allowed the infantry to keep pace with tank formations. In 1967, the first mass produced infantry fighting vehicle was fielded by the Soviets in the form of the BMP.52 This fighting vehicle, currently the standard by which other IFUs are measured, has seen action in the Yom Kippur War and in Afghanistan, albeit with mixed results. Armored infantry equipped with the BMP is assigned to the force structure in a manner that appears to reflect a specific role.

Soviet ground maneuver forces are highly modernized, with a mix of tank, mechanized infantry (APC equipped) and armored infantry (BMP/BMD) units in their maneuver divisions. They achieve this mix by assigning three infantry regiments and one tank regiment to each motorized rifle division (MRD) with one of the infantry regiments equipped with the BMP. With the recent advent of the BTR-70, an armored personnel carrier, it appears that the Soviets will keep their mechanized/armored infantry mix in the MRD in the future. All infantry units assigned to tank divisions are armored infantry, equipped with the BMP.53 The Soviet Union has apparently made a conscious decision in favor of a balanced armored/mechanized infantry approach. Only tank divisions are completely modernized (IFV/MBT) units while motorized divisions have only one third of their infantry strength equipped with the BMP.54 This demonstrates that the Soviets still envision a mission for infantrymen riding in armored personnel carriers. Training of these infantrymen is somewhat simplified because all infantry is mechanized. There is no

separate light force with a ground maneuver mission that competes for the training priorities of the Soviet infantryman.

Schooling and tactical education for Soviet armored infantry officers occur at a series of all arms schools, which concentrate on teaching the combined arms concept and the close integration of infantry units with tank units. It should be noted that the Ground Force operates separate schools for tank arms.55 Training at the unit level is largely devoted to the practice of battle drills to insure uniformity throughout the armored infantry community. Armored infantry training and education are frequent topics in unclassified Soviet journals.56 The Soviets appear to have thought long and hard about the employment of their armored infantry formations.

The Soviet Union has developed and employed an effective armored infantry force with infantry fighting vehicles which have been as mobile as their main battle tanks. Their doctrine maintains that the armored infantry remains mounted for as long as possible in support of tank operations.57

The Soviet Union originally foresaw the BMP as capable of independent raiding operations but later modified this position based upon the results of the Yom Kippur War. 58 The vulnerability of the BMP is now viewed by the Soviets as a serious problem. 59 However, the poor performance of the BMP may have been the result of Syrian incompetence rather than a design problem. Of the 100 or so BMPs committed to action on the Syrian front in 1973, about 50 to 60 were lost. Upon inspection of these losses, a large portion were abandoned with just minor mechanical failures. 60

The structure of Soviet divisions also affects the tactical employment of the Soviet armored infantryman. The Soviets see IFU equipped units as second echelon forces at the division and army level when attacking prepared defenses.61 Usually, the motorized rifle division will attack with motorized rifle regiments (BTR) forward and the tank regiment and the BMP equipped motorized rifle regiment in the This allows the infantry heavy forces in the BTR second echelon. equipped regiments to use their heavy dismounted strength to force penetrations and clear enemy antitank defenses during offensive operations with the tank forces supported by IFVs, then committed to exploit the success of the first echelon. The Soviets see the motorized rifle division as the desirable unit to conduct defensive operations. This allows the BTR regiments to be placed forward and to use their superior dismounted strength to anchor the defense. Tank and IFV forces are used to provide depth and mobility to the defense.62

The Soviets maintain a system for their armored infantry that is closely aligned with the armor force. The Soviets have determined that heavy forces should be the focus of their efforts and have developed their priorities accordingly. In essence, the traditional infantry dismounted unit is the element that has been almost totally replaced by armored infantry.

The Soviets have had armored infantry armed with the BMP for nearly twenty years. They see a clear mission for armored infantry and have organized formations to maximize its capabilities and minimize its vulnerabilities. Combined arms synergy is achieved in the Soviet forces by closely integrating armored infantry with tank units with the habitual relationship between these forces increasing training

opportunities for all. The Soviets have mounted all of their forces in a manner similar to the Germans but only half of the infantry force is equipped with fighting vehicles. Thus, it can be said that half of the infantry force is 'mechanized' and the other half is 'armored,' a situation which creates some tactical and technical problems because a leader must learn to employ both armored infantry and infantry in personnel carriers.

A quick glance at the Israeli armored infantry concept gives the reader another developmental and force structure view. Since World War II the Israelis have had an opportunity to test the armored concept on three separate occasions with the largest armored battles since 1945 fought and won by the Israeli Army. It could be said that the battlefields of the Middle East have been the proving ground for modern technology for the last twenty years.

One must be extremely careful with the conclusions drawn from the Israeli experience, however, because of her unique situation. The armored force of Israel has been developed for fighting in open desert terrain, against a specific enemy and with specific resource constraints. Although all lessons learned from their experience must be viewed in light of these considerations, that does not necessarily mean that the lessons are any less valuable than those of other armored forces.

Israel was a nation born in battle. During the initial fight for independence in 1948, the Israelis fought with what they had; in the case of the armor force, that was very little. The war was fought mostly with mobile infantry mounted on an assortment of jeeps, armored trucks and M-3 half tracks.63 Tanks were used in support of mobile

infantry under the "mobile infantry-tank exploitation" concept of Generals Yadin and Dayan, a concept which remained the basis for infantry organization up to the 1956 Suez War.64 The success of Col Ari's Seventh Armored Brigade dash to the Suez in the 1956 Crisis caused the Israelis to reevaluate their position on armored forces.65 The result was a clear victory for the tank school of warfare.

The tank pure concept continued to gain momentum in the 1960s. When General Tal took command of the armor corps in 1964, he insured that tank heavy forces were the priority of the army, with mechanized infantry seen as a mopping up force that would follow tank forces to reduce bypassed enemy strongpoints. General Tal refused to upgrade the mechanized force, believing instead that the infantry could get by on an inferior manpower and equipment. The mechanized infantry is the responsibility of the armor corps in the Israeli army; as a result, manpower and equipment resources were diverted from the armored infantry to the tank units.66 The results of the 1967 Six Day War appear to have confirmed General Tal's pure tank concept.

The Six Day War was a striking victory for the tank. The tank forces were able to suppress and destroy enemy anti-tank positions without the use of armored infantry. The state of quality and training in the Israeli mechanized infantry was considered so low that General Tal gave the armored vehicles of a mechanized brigade to the elite airborne brigade, in spite of their lack of mechanized training, because they were considered much better fighters. The success of unsupported tank units in 1967 led to the further demise of the armored infantry.

As noted earlier, with the armored corps in control of the training and doctrinal development of the armored infantry, mechanized infantry

was stripped of assets to strengthen the tank units. Israeli armored infantry efficiency suffered considerably because of this policy; the Yom Kippur War in 1973 demonstrated the shortsightedness of this program. Why the armor control of the armored infantry failed to produce combined arms synergy can be attributed to the particular situation of Israel. The Israelis based their decision to neglect their infantry force based upon their expected battlefields. They felt that the tank would completely dominate in the future without infantry support, an opinion not espoused by any other nation.

The Yom Kippur War was a classroom for the modern armored concept. The anti-tank strength of the Egyptian forces dealt the tank pure forces of the Israelis a series of initial setbacks. With no effective armored infantry in support, the Israelis were unable to suppress and defeat the Egyptian forces with tank pure forces.68 One lesson of this war was that the Israeli armored infantry force had to be improved.

Nonetheless, the acquisition of true infantry fighting vehicles has been a subject of heated debate within Israel. Gen Tal does not believe the acquisition of IFVs is cost effective. The Merkava heavy tank has been a solution for the Israelis. The vehicle was developed to have the protection and firepower of a tank and still be able to carry personnel. One problem with this system is reduction in ammunition stowed load if troops are to ride in the personnel compartment.69 The dual role of heavy tank and infantry carrier appears to be a contradiction. With the low production numbers of the Merkava, there will not be enough of these to perform both the tank mission and armored infantry mission at the same time. What then is the future of the Israeli armored infantry force?

To date, the Israeli system for armored infantry management has not proved satisfactory. Their system for management of the armored infantryman is to assign an infantry occupational specialty while making the Armor Branch responsible for manning, training and development of the armored infantry force. As a result, the armored infantry remains a distant priority in relation to the armor force. New equipment and better integration between armor and infantry is advocated but little real progress appears to be forthcoming. Israeli experts contend that the unarmed armored personnel carrier should be a thing of the past.68 They also note that some type of armored fighting vehicle is needed to support the tank force.70 Whether the Merkava is the answer to the armored infantry problem remains to be seen. The Israelis, in spite of their battlefield experience, do not appear to believe in the utility of expensive armored infantry forces.

The Israeli experience, while valuable, is based upon a unique situation. They have fought an enemy armed with technical equipment but without an effective educational and military infrastructure to maximize the equipment's full potential. The terrain for future battlefields will remain with its extended observation, favoring tank heavy forces. The Israelis will continue to operate on interior lines in any future battle. The Israeli economy will only support a relatively limited force in size and cost of equipment. These are but a few of the unique situational factors under which the Israeli armored infantry operates.

The preceding discussion demonstrates that there is not an approved solution for the management of the armored infantry force. Each country discussed views its particular situation as unique and manages its armored infantry force accordingly.

OPTIONS FOR ORGANIZATION

In the four examples discussed, the management of the armored infantryman within the force structures has taken different courses. In the US Army, the armored infantryman receives a special skill designator but remains a part of a much larger non-armored infantry community. The German Army has decided to convert all of its infantry, except for selected special units (airborne, mountain), to armored infantry. German Panzergrenadiers are members of combined arms brigades and tank/panzergrenadier units are the responsibility of the armored corps. The Israelis do not firmly believe in the armored infantry concept. The armored corps has the responsibility for Israeli armored infantry and the armored infantry remains a low priority force, a priority reinforced by the failure of the armored corps to plan for the acquisition of infantry fighting vehicles. The Soviet Union appears to have an armored infantry concept that is balanced and well planned. While all forces are mechanized, less than half are armored infantryman. The infantry is responsible for the armored infantry but the training and developmental priority appears to be heavily weighted to the armored infantry mission.

Combinations and permutations of these options exist, but in the US context the most promising developmental options for armored infantry appear to be:

1. Maintain the infantry specialty, allowing Infantry to remain responsible for the training of armored infantrymen. This continues current US Army policy and is similar to the policy of the Soviet Union, except that in the USSR, armored infantry is the infantry area of emphasis.

- 2. Assign a separate specialty; begin an independent branch. This would mean the development of a Panzergrenadier/Dragoon Branch, coequal with existing branches. This approach is similar to the German approach, although in theory the German Panzergrenadier remains an infantryman. In fact, the armored infantry forces of the German Army are a separate branch, coequal with the armor.
- 3. Maintain the infantry specialty, but allow Armor to be responsible for armored infantry training. In this option, the armored infantryman would retain his infantry link but control and development of this force would be the responsibility of the Armor School. A variation of this system is currently practiced by the Israeli Army.

Thus, the three major options available to the US Army for the management of the armored infantry recognize that the armored infantry force is either an infantry element, an armor element or a new force somewhere in between infantry and armor. Whatever it is, there appear to be some objectives that should be maximized in the structure and management of armored infantry. These objectives should be the standards by which an option is measured when evaluation of a management option is undertaken.

OBJECTIVES

The armored infantry would be a significantly more effective force if several important objectives could be maximized. The objectives include the creation of combined arms synergy, the effective training of the armored infantryman, the development of necessary technical and tactical skills, and the existence of an efficient manning policy to insure that expensive skills are not lost by poor assignment policies.

These objectives are set against the backdrop of cost limitations and bureaucratic political constraints. The armored infantry force must be cost effective and politically acceptable to the rest of the Army. The management option most able to attain these objectives without negating any one objective may be the best option for management of the armored infantry force. Prior to evaluation, each objective should be further defined.

Creation of combined arms synergy is the premier objective of any armored infantry force since the combat power produced by the combining of arms is greater than the sum of its parts.72. This synergy may be attained only when one arm clearly understands its own vulnerabilities and learns to use other arms to compensate for them. This realization is not as easy to achieve as it appears. Many non-armored infantry forces conduct missions that do not directly involve tank/infantry integration although armored infantry forces will seldom operate without tanks. The result is that a large portion of our infantry force does not receive adequate training in tank/infantry combined arms operations, while the armored infantryman and the armor soldier clearly understand that success depends upon the other. This same attitude is not bred into every infantryman who may be used to executing missions independently. The result is that non-armored infantrymen assigned to armored infantry units usually require at least 18 months to understand clearly the armored infantry/tank team. This period of training degrades the synergy of the combined arms, a deficiency which may require special management considerations for the armored infantryman.

Closely associated with the attainment of synergy is the objective of specialized and effective armored infantry training. The training of

the armored infantryman to use his fighting vehicle effectively is a prerequisite for the success of the armored infantryman. The invention of a new weapon, like the fighting vehicle, is easier to accomplish than the assimilation of the system into the force structure.73 The armored infantryman must be trained to develop a new mindset; that is, he must think more like a tanker than an infantryman and is required to view his mission priorities in that vein. The skills of crew gunnery, maintenance, speed, mobility and shock all have a different meaning for the infantryman and the armored infantryman. This new mindset will improve the cohesion and teamwork of the armored infantry/tank team, thus improving the capabilities of our tank forces. The tank force will develop more confidence in its armored infantry support as they continue to work and train together.

The introduction of the Bradley Fighting Vehicle to the unit has changed entirely the technical and tactical requirements of the armored infantryman. The armored infantry leader now operates and employs a sophisticated piece of equipment that is clearly more complicated than anything he has previously encountered. The infantry fighting vehicle is armed with a stabilized 25mm automatic cannon, a TOW missile system, a 7.62 coaxial machinegun, firing port weapons, smoke grenade launchers, an on board smoke generator and a dismounted infantry squad with its organic weapons. Thus, the Bradley leader is expected to have mastered both the system skills of the tank crew and the dismounted skills of the light infantry squad. The armored infantry leader has a difficult time reconciling this dilemma without a clear prioritization of requirements. The tactical options available to the armored infantry leader are significantly greater than those faced by any other small unit leader.

The training required to learn these technical and tactical skills can only be learned by hands on training. Quality performance will not be achieved by the armored infantryman without extensive practice and experience.

The creation of an efficient manning policy must insure that the armored infantryman retains fighting vehicle technical and tactical skills. As previously mentioned, the armored infantryman already receives a special designator with his infantry occupational specialty. Recent personal experience in the 3rd Infantry Division indicated that it took forty days of uninterrupted training to transition an 11B infantryman to an 11M infantryman on the technical aspects of the infantry fighting vehicle. This training was expensive and resource intensive, yet these skills will be easily lost if an effective assignment policy is not pursued. Armored infantrymen must be closely managed to insure that 11Ms remain in armored infantry units and that non-armored infantrymen are not assigned to armored infantry units. While the benefits of the execution of this policy appear evident, the realities of execution limit attainment.

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順をでくりでもとた。 関われないとした日 自己のはないとしたない。 The discussion of objectives is not complete without consideration of the constraints of cost. Cost effectiveness is a serious consideration in every decision made in this age of constrained resources. An additional armored infantry branch or a significant change of the current system would require a cost analysis beyond the scope of this paper. Yet cost-benefit analysis is necessary to refute such simplistic arguments as, "If one soldier can successfully accomplish two missions at the same time, why should two soldiers be assigned one mission each?"

Finally, the bureaucratic political considerations of the management of the armored infantry must be evaluated. Proposals for a change in armored infantry proponency or management must so clearly satisfy the shortcomings of the present situation that opposition can only appear to stem from blatant branch parochialism. Proposed solutions must not appear to be of a zero sum nature; rather, effective management of armored infantry should be presented in light of improved combined arms synergy. Nonetheless, there is perceived sacred ground in this area that must be softly tread. A compromise solution is better than no solution at all.

How these particular objectives are weighted will determine which option for an armored infantry specialty is the best for the U.S. Army force structure. This determination, somewhat subjective in nature, requires some order of precedence to be established to evaluate each particular option. One objective may be attained under one option while another consideration may suffer under the same option.

EVALUATION OF OPTIONS

Evaluating the options outlined in the previous discussion will help to determine the direction that the US Army should pursue for the maximization of its armored infantry resource. Creating combined arms synergy, training the armored infantry force, developing technical and tactical skills, insuring political acceptability and cost effectiveness, and creating an efficient assignment policy are all objectives weighted and influenced by subjective measures. This monograph weights these objectives based upon the criteria below.

Creating combined arms synergy is the goal that must take precedence over all of the others. <u>FM 100-5</u>, <u>Operations</u>, clearly states

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that combined arms synergy will not take place without the co-ordination of armor and armored infantry and, further, asserts that victory depends upon the synchronization of combat activities.74 Contributing directly to achievement of synergy is the objective of adequately training the armored infantry force to accomplish its role in the combined arms force. FM 100-5, Operations, identifies training as the cornerstone of success and argues that the training objective is next in order of precedence.75 Developing technical and tactical skills which reinforce the armored infantry mission orientation are closely aligned with the training objective. These objectives, therefore, are equally weighted and follow the objective of training the armored infantry force in order Reality makes political acceptability the next of precedence. consideration. In our society, political compromise is essential to get any job done. There will not be a unanimous decision determining who manages armored infantryman. However, political considerations should be kept in perspective and not be allowed to affect adversely the objectives of synergy and training. Political considerations alone must be overruled in favor of other criteria. Hand in hand with political considerations, cost effectiveness is a double-edged sword as an option constraint. Short range cost reduction frequently leads to long range expense or as the advertisement says, "You can pay me now or you can pay me later.... Therefore, the best long range option may be the most cost effective. A detailed analysis is necessary. Finally, insuring an efficient assignment policy is the last objective by which an option will be evaluated. If the other criteria can be adequately satisfied, an efficient assignment program can be created under a variety of conditions.

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The first option for the management of the armored infantry force is to pursue our current program by continuing to assign the infantry 11 series specialty, with an M identifier, and allow the Infantry to continue to train the armored infantry force. This option was examined in the introduction of this paper, but several points need to be compared to the objectives outlined in the previous section.

The current policy for the management of the armored infantry force has some important strengths. Of the three options, it is the least costly and is no doubt the most acceptable politically. Maintaining the status quo will incur less expense than creating a new structure to manage the armored infantry. Politically, Infantry would keep complete control over a large portion of its mission and personnel. In theory, the current system could train and develop the armored infantryman while the assignment of the special armored infantry designator could insure that he stays in the armored infantry track. The US Army has not enjoyed as much success with this policy as the Soviets have. If emphasis and resource allocation could be achieved as in the Soviet system, this option would be considerably more attractive. However, as the current policy is executed, it contains several important shortcomings.

Infantry management of the armored infantry has produced some serious weaknesses in the US Army's armored infantry potential. Combined arms synergy is not being maximized by the present system. Notwithstanding claims to the contrary, the Armor and Infantry Centers seem to act independently of each other and the creation of emphasis on combined arms must wait until the soldier reaches his unit where the proper mindset is instilled. This shortcoming is a result of the lack

of resource allocation and emphasis. There is no Armored Infantry Department at Fort Benning to help integrate the armored infantry/tank effort. The armored infantry mission is not seen as unique and is treated merely as an additional mission to normal infantry tasks. Armored infantry training suffers as a result. The education system at Fort Benning does not reflect a proper balance of training resources with the lighter and more deployable forces receiving a disproportionate share of training emphasis and development. Armored infantry tactical and technical skills must be taught at the unit because the Infantry School has not devoted adequate assets to this mission.

Furthermore, the assignment of armored infantry men and officers has not been efficient. The infantry's diverse missions and priorities cause the malassignment of personnel. This is especially true of the young infantry officer. He arrives at the armored infantry unit with a good infantry background but an inadequate level of armored infantry training. After three years learning the mission, he is likely to be assigned elsewhere in the infantry community in an effort to broaden his experience. This "well-rounded approach" may have other merits but ignores the highly perishable skills of the armored infantryman. Currently the armored infantry has no place of emphasis in the US Army. Unless the Infantry Community pursues an aggressive policy to overcome these deficiencies, armored infantry potential will not be maximized. This leads the reader to pursue another option.

The creation of a Panzergrenadier/Dragoon Branch for the management of the armored infantry would satisfy several key criteria. Training and the development of technical skills would be maximized under this option. There would be a clear mission orientation on the armored

infantry effort. Under a Dragoon Branch, presently missing doctrinal development could occur because a dedicated sponsor would have a stake in the outcome of such development. The Dragoon Branch with its own specialty would control assignment of personnel, thus, insuring that armored infantry would always be assigned to armored infantry units upon rotation. Creation of combined arms synergy would be improved over the present situation based upon the continual working relationship that would exist between the armor and the armored infantry. Another important outcome of the Dragoon Branch option would be a clear sense of identity for the armored infantryman. A career could be pursued in this field without the fear of penalty that occurs in specialization in one area of a broader field. The German Panzergrenadier operates under a concept similar to the Dragoon Branch option and the Bundeswehr has enjoyed some success with the selection of this management technique. While there appears to be some attractive advantages for the selection of the Dragoon Branch option, there are some serious shortcomings as well.

The creation of a Dragoon Branch fails to adequately consider the cost and political constraints which form the backdrop of this issue. The establishment of the Dragoon Branch is a most expensive option. The starting costs, personnel and space to establish an independent Dragoon Branch as a TRADOC school and center, could prove prohibitive while the administrative burden of another branch may be more than is necessary to achieve an adequate level of objective attainment.

Infantry would no longer be the largest branch in the service as a result of the loss of armored infantry, but many of the skills of the infantry and armored infantry would remain the same, resulting in

proponency battles. Although combined arms synergy would be improved, as argued earlier, it may not be maximized. An independent branch may tend to look inward and become self-centered. The result could interfere with the integration of the armored infantry/tank team. Thus, while the Dragoon option may look desirable, it is necessary examine a compromise option.

A compromise option is to maintain the current infantry series specialty, while aligning and managing the armored infantry under the armored corps. The Israeli Army has chosen this path. This alternative satisfies several key criteria. Combined arms synergy of the tank/armored infantry force, the most important objective, would be improved since the armor and the infantry communities would be forced to work closely together to develop doctrine and tactics for implementation. The armor perspective would soon infect the armored infantry in such an environment and the primary mission of tank support would be strengthened. Tank crew skills and training methods would be shared with the armored infantry, enhancing the technical and tactical skills of the armored infantry. A clear emphasis on mission and training priority would be evident. The infantry affiliation and tradition could be maintained with the armored infantry remaining part of the infantry family while trained and assigned in a separate role. The costs of such a policy could be controlled more easily than the Dragoon option and the known necessary fixes to the current policy. Yet, there may be unacceptable aspects to this option as well.

This option is politically costly and may result in the loss of important tactical skills for the armored infantryman. The Infantry will lose a large portion of its control over the armored infantryman

while the skills of these infantryman would suffer due to loss of contact with light infantryman. Armor may be perceived as gaining resources at the expense of Infantry. While the Israeli example demonstrates this option does not necessarily insure that the armored infantry will receive the resource priority deserved, the situation in the United States appears to be substantially different from that in Israel. The US armored infantryman would be assigned a specific mission of armor support and, with the priority of this mission, would enjoy the additional resources and status that a separate infantry arm should expect.

CONCLUSIONS

Based upon the evaluation above, each option has strengths and weaknesses as applied to the objectives to be satisfied. For example, combined arms synergy is best attained by Armor management; followed by independent branch management and Infantry management. The objective of training can best be achieved under the independent branch option, followed closely by Armor management. Tactical and technical development would also be best realized by an independent branch, followed by Armor control. The objectives of cost effectiveness and political feasibility are best met by pursuing the current policy of Infantry management. Armor management is the next most cost effective and politically feasible option, followed in a distant third place by the option of a Dragoon Branch. An effective assignment policy would occur in a Dragoon Branch, followed in order by Armor Branch management and Infantry Branch management. Thus, each option has its positive and negative points and the problem becomes one of finding a complementary and viable solution.

The evaluations find the current policy is the least effective option in the areas of creating synergy, increasing training, developing tactical skills and insuring an effective assignment policy. While the Infantry has developed a series of programs and initiatives to address these problems, they are not being aggressively pursued and the historical neglect of the armored infantry continues to be practiced.

The development of a Dragoon specialty appears attractive until the constraints are taken into consideration. The Dragoon option maximizes several objectives, fairs well in others but is a distant last when compared to Infantry and Armor options in the areas of cost and acceptability. These constraints make the Dragoon specialty an unacceptable management option at this time.

A final combined option with great potential for achieving the key objectives without seriously violating constraints is the retention of the infantry specialty, with Armor management. This alternative increases combined arms synergy, training, tactical and technical skill, and provides an effective assignment policy — without certain unacceptable outcomes in the areas of cost and political feasibility. This approach would employ the present system while broadening the base of commitment for all concerned. Infantry would retain the specialty and basic training while Armor would assume control for development and advanced training. This is the most pragmatic choice and requires only that the branches do more than pay lip service to the armored infantry concept.

A new approach is necessary to energize the US force structure to think about its armored infantry resource. The tank/armored infantry force is capable of executing maneuver options that were not previously

realistic. The modernized armored infantry/tank team is able to execute the tenets of AirLand Battle better than any other force if it is properly and innovatively managed. Armor management of the armored infantry appears to have the greatest possibility of achieving the required success.

Maintaining the infantry specialty under Armor management combines the best of both communities. Both Infantry and Armor would gain under this arrangement inasmuch as the armored infantry would be linked with the traditional infantry force while maximizing its potential with tank Furthermore, the Armor is uniquely suited for the task of forces. managing the advanced training and doctrinal development of the armored infantry. The Armor mindset -- mobility, firepower, shock, protection and maintenance -- is essential to accomplish the 'armored force' mission. Gunnery, technical and tactical skills of both the armor and the armored infantry are closely akin. An integrated training approach would capitalize on the standardization of the 'armored force' and produce maximum combined arms synergy. The benefits of this option far outstrip any costs that this course of action would incur. Bradley and Abrams forces were designed to be stationed together in times of peace and to fight together on the battlefield. This alternative of maintaining the infantry specialty with Armor management moves the 'armored force' toward that end.

END NOTES

- ¹U.S. Army, <u>FM 17-20</u>, <u>Armored Infantry Units Platoon, Company and Battalion</u>, (Washington, D.C.: U.S. Army, August 1957), p. 3.
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